



12700 Park Central Drive | Suite 2100 | Dallas, TX 75251 | P (972) 661-8100 | F (972) 385-9203

trinityconsultants.com



December 4, 2017

Texas Commission on Environmental Quality (TCEQ)  
Air Permits Division  
Rule Registration Section  
(Submitted via STEERS)  
12100 Park 35 Circle  
Building C, Third Floor, MC 163  
Austin, TX 78753

RE: *Permit By Rule Registration Revision Application for Permit No. 147140*  
*Building Materials Investment Corporation – Dallas Plant – Dallas, TX, Dallas County*  
*Customer Reference Number (CN) 605251487*  
*Regulated Entity Reference Number (RN) 100788959*

Dear Sir or Madam:

Building Materials Investment Corporation doing business as GAF Materials Corporation (GAF) owns and operates an asphalt roofing production facility located in Dallas, Texas (Dallas Plant). GAF operates under Texas Commission on Environmental Quality (TCEQ) Customer Reference Number (CN) 605251487. The Dallas Plant has been assigned TCEQ Air Quality Account Number DB-0378-S and Regulated Entity Number (RN) 100788959. Operations at GAF Dallas Plant are authorized under New Source Review (NSR) Permit No. 7711A, Standard Permit No. 91414 and several non-registerable Permits by Rule (PBRs). The Dallas Plant is a Title V facility operating under Site Operating Permit (SOP) No. O-2771.

On June 7, 2017, GAF submitted a PBR registration application to authorize Line 3 sealant application system that includes one new Line 3 sealant run tank, associated self-seal applicator, laminate self-seal applicator, and a Heatec heater. On July 12, 2017, TCEQ issued the PBR Registration No. 147140 for the Line 3 sealant application system.

With this PBR revision application, GAF proposes to install an Adhesive Storage Tank (Tank ID: TK-AD, 3120 Adhesives Storage Tank) for the existing Line 3 sealant application system and authorize associated changes.

Appropriate sections of the application have been identified as confidential. With this letter, the non-confidential version of the application is being submitted via TCEQ STEERS system. The confidential sections are being submitted directly to the TCEQ Rule Registration Section and Regional Office in a separate copy in hardcopy format. The confidential information should not be disclosed to the public.

The \$450 PBR fee has been submitted to the TCEQ Revenue Section via the STEERS ePermits system at the time of submittal.

If you have any questions regarding this submittal, please feel free to contact me at (972) 661-8100 or via email at [lbao@trinityconsultants.com](mailto:lbao@trinityconsultants.com), or Mr. Kevin Bush, GAF, at (214) 637-8933.

Sincerely,

Trinity Consultants



Lele Bao, P.E.  
Consultant

cc: Ms. Elizabeth Smith, Air Section Manager, TCEQ Region 4  
Ms. Joni Keach, Section Manager, City of Dallas Air Pollution Control Program  
Mr. Kevin Bush, GAF  
Ms. Latha Kambham, Trinity Consultants

Enclosure



# TCEQ PERMIT BY RULE REVISION APPLICATION NEW ADHESIVE TANK

**Building Materials Investment Corporation - Dallas, TX**



Prepared By:

Latha Kambham, Ph.D. – Managing Consultant  
Anupama Krishnan, CEA – Senior Consultant  
Lele Bao, P.E. – Consultant

## **TRINITY CONSULTANTS**

12700 Park Central Drive  
Suite 2100  
Dallas, Texas 75251  
(972) 661-8100

**NON-CONFIDENTIAL VERSION**

December 2017

Project 174401.0287



*Environmental solutions delivered uncommonly well*

## TABLE OF CONTENTS

---

<b>1. EXECUTIVE SUMMARY</b>	<b>1-1</b>
<b>2. TCEQ FORMS AND APPLICABILITY CHECKLISTS</b>	<b>2-1</b>
<b>3. PERMIT BY RULE FEE</b>	<b>3-1</b>
<b>4. PROCESS DESCRIPTION</b>	<b>4-1</b>
<b>5. EMISSIONS DATA (CONFIDENTIAL)</b>	<b>5-1</b>
<b>6. GENERAL REQUIREMENTS</b>	<b>6-1</b>
6.1. Requirements for Permitting by Rule (30 TAC §106.4), Effective April 17, 2014 .....	6-1
6.2. Requirements for Recordkeeping (30 TAC §106.8), Effective November 1, 2001 .....	6-4
<b>7. SPECIFIC PERMIT BY RULE REQUIREMENTS</b>	<b>7-1</b>
7.1. Requirements for Facilities (Emission Limitations) (30 TAC §106.261), Effective November 1, 2003 .....	7-1
7.2. Requirements for Facilities (Emission and Distance Limitations) (30 TAC § 106.262) Effective November 1, 2003 .....	7-2
7.3. Requirements for Organic and Inorganic Liquid Loading and Unloading (30 TAC § 106.472) Effective September 4, 2000.....	7-7
<b>APPENDIX A: EMISSION CALCULATIONS (CONFIDENTIAL)</b>	
<b>APPENDIX B: SAFETY DATA SHEET (CONFIDENTIAL)</b>	

# 1. EXECUTIVE SUMMARY

---

Building Materials Investment Corporation doing business as GAF Materials Corporation (GAF) owns and operates an asphalt roofing production facility located in Dallas, Texas (Dallas Plant). GAF operates under Texas Commission on Environmental Quality (TCEQ) Customer Reference Number (CN) 605251487. The Dallas Plant has been assigned TCEQ Air Quality Account Number DB-0378-S and Regulated Entity Number (RN) 100788959. Operations at GAF Dallas Plant are authorized under New Source Review (NSR) Permit No. 7711A, Standard Permit No. 91414 and several non-registerable Permits by Rule (PBRs). The Dallas Plant is a Title V facility operating under Site Operating Permit (SOP) No. O-2771.

Dallas County is currently classified as a moderate nonattainment area for the 2008 eight-hour (8-hour) ozone standard, and is an attainment or unclassified area for all other criteria pollutants.<sup>1</sup> Effective on December 8, 2016, the Dallas-Fort Worth (DFW) Ozone Nonattainment Area is re-designated as an attainment area for the 1997 8-hour ozone standard.<sup>2</sup> Therefore, Dallas County is currently classified as attainment for the 1997 8-hour ozone standard. The Dallas Plant is an existing minor source with respect to Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NNSR), but is a major source with respect to the federal operating permits program (Title V) due to potential emissions of particulate matter with an aerodynamic diameter of less than or equal to 10 microns (PM<sub>10</sub>) and sulfur dioxide (SO<sub>2</sub>).

On June 7, 2017, GAF submitted a PBR registration application to authorize Line 3 sealant application system that includes one Line 3 sealant run tank, associated self-seal applicator, laminate self-seal applicator, and a Heatec heater. On July 12, 2017, TCEQ issued the PBR Registration No. 147140 for the Line 3 sealant application system.

With this PBR revision application, GAF proposes to install an Adhesive Storage Tank (Tank ID: TK-AD, 3120 Adhesive Storage Tank) for the existing Line 3 sealant application system. The proposed 3120 Adhesive Storage Tank will also feed the existing self-seal applicator and laminate self-seal applicator. No changes are proposed to the existing Line 3 sealant run tank. The project details are discussed in Section 4.

GAF proposes to authorize the 3120 Adhesive Storage Tank and associated emissions under Title 30 of the Texas Administrative Code (30 TAC) Section (§) 106.472, *Organic and Inorganic Liquid Loading and Unloading*, effective September 4, 2000. GAF also proposes to authorize the emissions resulting from the proposed throughput changes to the self-seal applicator and laminate self-seal applicator in Line 3 sealant application system under PBRs pursuant to 30 TAC §106.261, *Facilities (Emission Limitations)*, effective November 1, 2003 and PBR 106.262, *Facilities (Emission and Distance Limitations)*, effective November 1, 2003. This PBR revision application includes the following:

- > Checklist for 30 TAC §106.4 (Requirements for Permit by Rule);

---

<sup>1</sup> The United States Protection Agency (U.S. EPA) Green Book. Source:

[https://www3.epa.gov/airquality/greenbook/anayo\\_tx.html](https://www3.epa.gov/airquality/greenbook/anayo_tx.html), accessed in November 2017.

<sup>2</sup> EPA proposed approval of a re-designation substitution and finding of attainment for the 1997 8-hour ozone NAAQS for the DFW area on May 25, 2016; and the final approval notice was published on November 8, 2016 with an effective date of December 8, 2016. As such, effective December 8, 2016, the NNSR thresholds will be based solely on the 2008 ozone NAAQS standards. The major source threshold for DFW changed from 50 tpy to 100 tpy as a moderate ozone nonattainment area.

- > Checklist for 30 TAC §106.261 (Facilities (Emission Limitation));
- > Checklist for 30 TAC §106.262 (Facilities (Emission and Distance Limitations));
- > Checklist for 30 TAC §106.472 (Organic and Inorganic Liquid Loading and Unloading);
- > Emission calculations and PBR 106.261/262 Evaluation;
- > TCEQ Table 1(a) (Emission Point Summary); and
- > Other supporting documentation.

The non-confidential version of the PBR Revision Application is being submitted to the TCEQ via the State of Texas Environmental Electronic Reporting System (STEERS). Appropriate sections of the application have been identified as confidential and are being submitted directly to the TCEQ Rule Registrations Section in hardcopy format. The \$450 PBR fee has been submitted to the TCEQ Revenue Section via the STEERS ePermits system at the time of submittal.

The enclosed forms and documentation demonstrate that the proposed project meets all applicable requirements of 30 TAC §106.261, 106.262 and 106.472, and the general requirements under 30 TAC §106.4. Emissions calculation details associated with the proposed project are provided in Appendix A of this PBR Revision Application. The Safety Data Sheet (SDS) of the 3120 Adhesives is included in Appendix B of this PBR Revision Application.

## 2. TCEQ FORMS AND APPLICABILITY CHECKLISTS

---

**PBR §106.4 Checklist**  
**PBR §106.261 Checklist**  
**PBR §106.262 Checklist**  
**PBR §106.472 Checklist**  
**Table 1(a)**

**Texas Commission on Environmental Quality**  
**Permit by Rule Applicability Checklist**  
**Title 30 Texas Administrative Code § 106.4**

The following checklist was developed by the Texas Commission on Environmental Quality (TCEQ), **Air Permits Division**, to assist applicants in determining whether or not a facility meets all of the applicable requirements. Before claiming a specific Permit by Rule (PBR), a facility must first meet all of the requirements of **Title 30 Texas Administrative Code § 106.4** (30 TAC § 106.4), “Requirements for Permitting by Rule.” Only then can the applicant proceed with addressing requirements of the specific Permit by Rule being claimed.

The use of this checklist is not mandatory; however, it is the responsibility of each applicant to show how a facility being claimed under a PBR meets the general requirements of 30 TAC § 106.4 and also the specific requirements of the PBR being claimed. If all PBR requirements cannot be met, a facility will not be allowed to operate under the PBR and an application for a construction permit may be required under 30 TAC § 116.110(a).

Registration of a facility under a PBR can be performed by completing **Form PI-7** (Registration for Permits by Rule) or **Form PI-7-CERT** (Certification and Registration for Permits by Rule). The appropriate checklist should accompany the registration form. Check the most appropriate answer and include any additional information in the spaces provided. If additional space is needed, please include an extra page and reference the question number. The PBR forms, tables, checklists, and guidance documents are available from the TCEQ, Air Permits Division Web site at: [www.tceq.texas.gov/permitting/air/nav/air\\_pbr.html](http://www.tceq.texas.gov/permitting/air/nav/air_pbr.html).

<b>1. 30 TAC § 106.4(a)(1) and (4): Emission limits</b>	
List emissions in tpy for <b>each</b> facility (add additional pages or table if needed):	
• Are the SO <sub>2</sub> , PM <sub>10</sub> , VOC, or other air contaminant emissions claimed for <b>each</b> facility in this PBR submittal less than 25 tpy?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
• Are the NO <sub>x</sub> and CO emissions claimed for each facility in this PBR submittal less than 250 tpy?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<i>If the answer to both is “Yes,” continue to the question below. If the answer to either question is “No,” a <b>PBR cannot be claimed</b>.</i>	
Has any facility at the property had public notice and opportunity for comment under 30 TAC Section 116 for a regular permit or permit renewal? (This does not include public notice for voluntary emission reduction permits, grandfathered existing facility permits, or federal operating permits.)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<i>If “Yes,” skip to Section 2. If “No,” continue to the questions below.</i>	
If the site has had no public notice, please answer the following:	
• Are the SO <sub>2</sub> , PM <sub>10</sub> , VOC, or other emissions claimed for <b>all</b> facilities in this PBR submittal less than 25 tpy?	<input type="checkbox"/> YES <input type="checkbox"/> NO
• Are the NO <sub>x</sub> and CO emissions claimed for all facilities in this PBR submittal less than 250 tpy?	<input type="checkbox"/> YES <input type="checkbox"/> NO
<i>If the answer to both questions is “Yes,” continue to Section 2.</i>	
<i>If the answer to either question is “No,” a <b>PBR cannot be claimed</b>. A permit will be required under Chapter 116.</i>	



**Permit by Rule Applicability Checklist**  
**Title 30 Texas Administrative Code § 106**

<b>2. 30 TAC § 106.4(a)(2): Nonattainment check</b>	
<ul style="list-style-type: none"> <li>Are the facilities to be claimed under this PBR located in a designated ozone nonattainment county?</li> </ul>	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
<i>If "Yes," please indicate which county by checking the appropriate box to the right.</i>	
(Moderate) - Brazoria, Chambers, Fort Bend, Galveston, Harris, Liberty, Montgomery, and Waller counties:	<input type="checkbox"/> HGB
(Moderate) - Collin, Dallas, Denton, Ellis, Johnson, Kaufman, Parker, Rockwall, Tarrant, and Wise counties:	<input checked="" type="checkbox"/> DFW
<i>If "Yes," to any of the above, continue to the next question. If "No," continue to Section 3.</i>	
<ul style="list-style-type: none"> <li>Does this project trigger a nonattainment review?</li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<ul style="list-style-type: none"> <li>Is the project's potential to emit (PTE) for emissions of VOC or NO<sub>x</sub> increasing by 100 tpy or more?  <i>PTE is the maximum capacity of a stationary source to emit any air pollutant under its worst-case physical and operational design unless limited by a permit, rules, or made federally enforceable by a certification.</i> </li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<ul style="list-style-type: none"> <li>Is the site an existing major nonattainment site and are the emissions of VOC or NO<sub>x</sub> increasing by 40 tpy or more?</li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<i>If needed, attach contemporaneous netting calculations per nonattainment guidance.</i>	
Additional information can be found at: <a href="http://www.tceq.texas.gov/permitting/air/forms/newsourcecercview/tables/nsr_table8.html">www.tceq.texas.gov/permitting/air/forms/newsourcecercview/tables/nsr_table8.html</a> and <a href="http://www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html">www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html</a>	
<i>If "Yes," to any of the above, the project is a major source or a major modification and <b>a PBR may not be used</b>. A Nonattainment Permit review must be completed to authorize this project. If "No," continue to Section 3.</i>	
<b>3. 30 TAC § 106.4(a)(3): Prevention of Significant Deterioration (PSD) check</b>	
Does this project trigger a review under PSD rules?	
To determine the answer, review the information below:	
<ul style="list-style-type: none"> <li>Are emissions of any regulated criteria pollutant increasing by 100 tpy of any criteria pollutant at a named source?</li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<ul style="list-style-type: none"> <li>Are emissions of any criteria pollutant increasing by 250 tpy of any criteria pollutant at an unnamed source?</li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<ul style="list-style-type: none"> <li>Are emissions increasing above significance levels at an existing major site?</li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
PSD information can be found at: <a href="http://www.tceq.texas.gov/assets/public/permitting/air/Forms/NewSourceReview/Tables/10173tbl.pdf">www.tceq.texas.gov/assets/public/permitting/air/Forms/NewSourceReview/Tables/10173tbl.pdf</a> and <a href="http://www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html">www.tceq.texas.gov/permitting/air/nav/air_docs_newsource.html</a>	
<i>If "Yes," to any of the above, <b>a PBR may not be used</b>. A PSD Permit review must be completed to authorize the project.</i>	
<i>If "No," continue to Section 4.</i>	

**Permit by Rule Applicability Checklist**  
**Title 30 Texas Administrative Code § 106**

<b>4. 30 TAC § 106.4(a)(6): Federal Requirements</b>	
<ul style="list-style-type: none"> <li>Will all facilities under this PBR meet applicable requirements of Title 40 Code of Federal Regulations (40 CFR) Part 60, New Source Performance Standards (NSPS)?</li> </ul>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<i>If "Yes," which Subparts are applicable?</i>	
<ul style="list-style-type: none"> <li>Will all facilities under this PBR meet applicable requirements of 40 CFR Part 63, Hazardous Air Pollutants Maximum Achievable Control Technology (MACT) standards?</li> </ul>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<i>If "Yes," which Subparts are applicable?</i>	
<ul style="list-style-type: none"> <li>Will all facilities under this PBR meet applicable requirements of 40 CFR Part 61, National Emissions Standards for Hazardous Air Pollutants (NESHAPs)?</li> </ul>	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NA
<i>If "Yes," which Subparts are applicable?</i>	
<i>If "Yes" to any of the above, please attach a discussion of how the facilities will meet any applicable standards.</i>	
<b>5. 30 TAC § 106.4(a)(7): PBR prohibition check</b>	
<ul style="list-style-type: none"> <li>Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs?</li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<i>If "Yes," PBRs may not be used or their use must meet the restrictions of the permit. A new permit or permit amendment may be required.</i>	
<i>List permit number(s):</i>	
<b>6. 30 TAC § 106.4(a)(8): NO<sub>x</sub> Cap and Trade</b>	
<ul style="list-style-type: none"> <li>Is the facility located in Harris, Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County?</li> </ul>	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<i>If "Yes," answer the question below. If "No," continue to Section 7.</i>	
<ul style="list-style-type: none"> <li>Will the proposed facility or group of facilities obtain required allowances for NO<sub>x</sub> if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3 (relating to the Mass Emissions Cap and Trade Program)?</li> </ul>	<input type="checkbox"/> YES <input type="checkbox"/> NO

**Permit by Rule Applicability Checklist  
Title 30 Texas Administrative Code § 106**

<b>7. Highly Reactive Volatile Organic Compounds (HRVOC) check</b>		
• Is the facility located in Harris County?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<i>If "Yes," answer the next question. If "No," skip to the box below.</i>		
• Will the project be constructed after June 1, 2006?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," answer the next question. If "No," skip to the box below.</i>		
• Will one or more of the following HRVOC be emitted as a part of this project?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," complete the information below:</i>		
	lb/hr	tpy
▶ 1,3-butadiene		
▶ all isomers of butene (e.g., isobutene [2-methylpropene or isobutylene])		
▶ alpha-butylene (ethylethylene)		
▶ beta-butylene (dimethylethylene, including both cis- and trans-isomers)		
▶ ethylene		
▶ propylene		
• Is the facility located in Brazoria, Chambers, Fort Bend, Galveston, Liberty, Montgomery, or Waller County?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
<i>If "Yes," answer the next question. If "No," the checklist is complete.</i>		
• Will the project be constructed after June 1, 2006?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," answer the next question. If "No," the checklist is complete.</i>		
• Will one or more of the following HRVOC be emitted as a part of this project?	<input type="checkbox"/> YES <input type="checkbox"/> NO	
<i>If "Yes," complete the information below:</i>		
	lb/hr	tpy
▶ ethylene		
▶ propylene		

**Save Form**

**Reset Form**

**Texas Commission on Environmental Quality  
Title 30 Texas Administrative Code § 106.261  
Permit By Rule (PBR) Checklist  
Facilities (Emission Limitations)**

The following checklist is designed to help you confirm that you meet Title 30 Texas Administrative Code § 106.261 (30 TAC § 106.261) requirements. If you do not meet all the requirements, you may alter the project design or operation in such a way that all the requirements of the PBR are met or you may obtain a construction permit. The PBR forms, tables, checklists, and guidance documents are available from the Texas Commission on Environmental Quality (TCEQ) Air Permits Division website at, [www.tceq.texas.gov/permitting/air/air\\_permits.html](http://www.tceq.texas.gov/permitting/air/air_permits.html)

For additional assistance with your application, including resources to help calculate your emissions, please visit the Small Business and Local Government Assistance (SBLGA) webpage at the following link: [www.TexasEnviroHelp.org](http://www.TexasEnviroHelp.org)

Check The Most Appropriate Answer	
	Is a description or checklist of how this claim meets the general requirements for the use of PBRs in 30 TAC § 106.4 attached? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA
b1	Is this claim for construction of a facility authorized in another section of this chapter or for which a standard permit is in effect? <i>If "YES," this PBR cannot be used to authorize emissions from the project.</i> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA
b2	Is this claim for any change to any facility authorized under another section of this chapter or authorized under a standard permit? <i>If "YES," this PBR cannot be used to authorize emissions from the project.</i> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> NA
a1	Are facilities or changes located at least 100 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA

**Save Form**

**Reset Form**

**Texas Commission on Environmental Quality**  
**Title 30 Texas Administrative Code § 106.261**  
**Permit By Rule (PBR) Checklist**  
**Facilities (Emission Limitations)**

**Check The Most Appropriate Answer (continued)**

a2 Are total new or increased emissions, including fugitives, less than or equal to 6.0 pounds per hour (lb/hr) and ten tons per year of the following materials<sup>1</sup> ☒ YES ☐ NO ☐ NA

**Check All That Apply**

- |  |  |   |  |
|--|--|---|--|
| <input type="checkbox"/> acetylene   | <input type="checkbox"/> cyclopentane      | <input type="checkbox"/> kaolin             | <input type="checkbox"/> propane         |
| <input type="checkbox"/> alumina   | <input type="checkbox"/> emery dust        | <input type="checkbox"/> limestone          | <input type="checkbox"/> propyl alcohol  |
| <input type="checkbox"/> argon   | <input type="checkbox"/> ethanol           | <input type="checkbox"/> magnesite          | <input type="checkbox"/> propyl ether    |
| <input type="checkbox"/> butane  | <input type="checkbox"/> ethyl acetate     | <input type="checkbox"/> marble             | <input type="checkbox"/> propylene       |
| <input type="checkbox"/> calcium carbonate   | <input type="checkbox"/> ethyl ether       | <input type="checkbox"/> methyl acetylene   | <input type="checkbox"/> silicon         |
| <input type="checkbox"/> calcium silicate  | <input type="checkbox"/> ethylene          | <input type="checkbox"/> methyl chloroform  | <input type="checkbox"/> silicon carbide |
| <input checked="" type="checkbox"/> carbon monoxide  | <input type="checkbox"/> glycerin mist     | <input type="checkbox"/> methyl cyclohexane | <input type="checkbox"/> starch          |
| <input type="checkbox"/> cellulose fiber   | <input type="checkbox"/> gypsum            | <input type="checkbox"/> neon               | <input type="checkbox"/> sucrose         |
| <input type="checkbox"/> cement dust   | <input type="checkbox"/> helium            | <input type="checkbox"/> nonan              | <input type="checkbox"/> sulfur dioxide  |
| <input type="checkbox"/> crude oil   | <input type="checkbox"/> iron oxide dust   | <input type="checkbox"/> oxides of nitrogen | <input type="checkbox"/> zinc oxide      |
| <input type="checkbox"/> cyclohexane   | <input type="checkbox"/> isohexane         | <input type="checkbox"/> pentaerythritol    | <input type="checkbox"/> zinc stearate   |
| <input type="checkbox"/> cyclohexene   | <input type="checkbox"/> isopropyl alcohol | <input type="checkbox"/> plaster of paris   |  |
| <input type="checkbox"/> refinery petroleum fractions (except for pyrolysis naphthas and pyrolysis gasoline) containing less than ten volume percent benzene |  |   |  |
| <input type="checkbox"/> fluorocarbons Numbers 11, 12, 13, 14, 21, 22, 23, 113, 114, 115, and 116  |  |   |  |

<sup>1</sup>Any upstream and/or downstream actual emission increases that result from a project for which this PBR is claimed need to be authorized appropriately. Any associated upstream and/or downstream emissions authorized as part of the PBR claim will need to be included as part of the total new or increased emissions, unless: 1) these emissions stay below current authorized emission limits; 2) there is not a change to any underlying air authorizations for the applicable units associated with BACT, health and environmental impacts, or other representations (i.e. construction plans, operating procedures, throughputs, maximum emission rates, etc.); and 3) this claim is certified via PI-7 CERT or APD-CERT. Notwithstanding the exclusion of any upstream and/or downstream emissions under this PBR claim, the total of all emission increases, including upstream and/or downstream actual emission increases, are required to be part of the PBR registration to determine major new source review applicability under Title 30 TAC Chapter 116. The emission increases associated with the PBR claim and all upstream and/or downstream actual emission increases may not circumvent major new source review requirements under 30 TAC Chapter 116.

**Texas Commission on Environmental Quality**  
**Title 30 Texas Administrative Code § 106.261**  
**Permit By Rule (PBR) Checklist**  
**Facilities (Emission Limitations)**

Check The Most Appropriate Answer	
a3	Are total new or increased emissions, including fugitives, less than or equal to 1.0 lb/hr of any chemical having a limit value (L) greater than 200 milligrams per cubic meter (mg/m <sup>3</sup> ) as listed and referenced in Table 262 of 30 TAC § 106.262 of this title (relating to Facilities (Emission and Distance Limitations)? <sup>2</sup> <div style="float: right;"> <input type="checkbox"/> YES   <input type="checkbox"/> NO   <input checked="" type="checkbox"/> NA           </div>
<div style="display: flex; justify-content: space-between;"> <span>List chemical(s):</span> <span>L value(s):</span> </div>	
Are total new or increased emissions, including fugitives, less than or equal to 1.0 lb/hr of any chemical not listed or referenced in Table 262? <sup>1</sup> <div style="float: right;"> <input checked="" type="checkbox"/> YES   <input type="checkbox"/> NO   <input type="checkbox"/> NA           </div> <p>List chemical(s): Carbonyl Sulfide</p>	
Are total new or increased emissions, including fugitives, of a chemical with a limit value of less than 200 mg/m <sup>3</sup> ? <sup>1</sup> <div style="float: right;"> <input checked="" type="checkbox"/> YES   <input type="checkbox"/> NO   <input type="checkbox"/> NA           </div> <p><i>If "YES" the authorization of the chemical is not allowed under this section. We suggest you use 30 TAC § 106.262 to authorize the emissions, if applicable.</i></p>	
a4	Are there any changes to or additions of any existing air pollution abatement equipment? <div style="float: right;"> <input type="checkbox"/> YES   <input checked="" type="checkbox"/> NO   <input type="checkbox"/> NA           </div>
a5	Will there be any visible emissions, except uncombined water, emitted to the atmosphere from any point or fugitive source in amounts greater than 5.0% opacity in any six-minute period? <div style="float: right;"> <input type="checkbox"/> YES   <input checked="" type="checkbox"/> NO   <input type="checkbox"/> NA           </div>
a6	Are emission increases five tons per year or greater? <div style="float: right;"> <input type="checkbox"/> YES   <input checked="" type="checkbox"/> NO   <input type="checkbox"/> NA           </div> <p><i>If "YES," this checklist must be attached to a Form PI-7 within ten days following the installation or modification of the facilities.</i></p> <p><b>[Note: The notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any.]</b></p>
a7	Are emission increases less than five tons per year? <div style="float: right;"> <input checked="" type="checkbox"/> YES   <input type="checkbox"/> NO   <input type="checkbox"/> NA           </div> <p><i>If "YES," this checklist must be attached to a Form PI-7 and include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any. (pick one):</i></p> <div style="margin-left: 20px;"> <input checked="" type="checkbox"/> Within ten days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any           </div> <div style="margin-left: 20px;"> <input type="checkbox"/> By March 31 of the following year summarizing all uses of this permit by rule in the previous calendar year.           </div>

<sup>2</sup> Any upstream and/or downstream actual emission increases that result from a project for which this PBR is claimed need to be authorized appropriately. Any associated upstream and/or downstream emissions authorized as part of the PBR claim will need to be included as part of the total new or increased emissions, unless: 1) these emissions stay below current authorized emission limits; 2) there is not a change to any underlying air authorizations for the applicable units associated with BACT, health and environmental impacts, or other representations (i.e. construction plans, operating procedures, throughputs, maximum emission rates, etc.); and 3) this claim is certified via PI-7 CERT or APD-CERT. Notwithstanding the exclusion of any upstream and/or downstream emissions under this PBR claim, the total of all emission increases, including upstream and/or downstream actual emission increases, are required to be part of the PBR registration to determine major new source review applicability under Title 30 TAC Chapter 116. The emission increases associated with the PBR claim and all upstream and/or downstream actual emission increases may not circumvent major new source review requirements under 30 TAC Chapter 116.

**Texas Commission on Environmental Quality  
Title 30 Texas Administrative Code § 106.262  
Permit by Rule (PBR) Checklist  
Facilities (Emission and Distance Limitations)**

The following checklist is designed to help you confirm that you meet Title 30 Texas Administrative Code § 106.262 (30 TAC § 106.262) requirements. If you do not meet all the requirements, you may alter the project design or operation in such a way that all the requirements of the PBR are met or you may obtain a construction permit. The PBR forms, tables, checklists, and guidance documents are available from the Texas Commission on Environmental Quality (TCEQ), Air Permits Division Web site at, [www.tceq.texas.gov/nav/permits/air\\_permits.html](http://www.tceq.texas.gov/nav/permits/air_permits.html).

For additional assistance with your application, including resources to help calculate your emissions, please visit the Small Business and Local Government Assistance (SBLGA) webpage at the following link: [www.TexasEnviroHelp.org](http://www.TexasEnviroHelp.org)

Check the Most Appropriate Answer			
Is a description or checklist of how this claim meets the general requirements for the use of PBRs in 30 TAC § 106.4 attached?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A	
b1.	Is this claim for construction of a facility authorized in another section of this chapter or for which a standard permit is in effect? <i>If "YES," this PBR cannot be used to authorize emissions from the project.</i>		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
b2.	Is this claim for any change to any facility authorized under another section of this chapter or authorized under a standard perm? <i>If "YES," this PBR cannot be used to authorize emissions from the project.</i>		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
c.	Is the facility authorized under another section of this chapter or under a standard permit? <i>If "YES," subsection (a)(2) and (3) of this section may be used to qualify the use of other chemicals at the facility.</i>		<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
a1.	Are facilities or changes located at least 100 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located?		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
a2.	Are new or increased emissions, including fugitives, emitted in a quantity less than five tons per year or in a quantity less than E as determined by using the equation $E=L/K$ ? <sup>1</sup> See Table 262 Figures 1 and 2. <i>If "YES," the notification shall include a description of the project, calculations for all emissions being claimed under this PBR:</i>		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Chemical: Asphalt Fume		L value: 5	D: 450 feet
		K: 92.5	
a3.	Is this checklist attached to a Form PI-7 within ten days following the installation or modification of the facilities? <i>If "YES," the notification shall include a description of the project, calculations, and data identifying specific chemical names, L values, and a description of pollution control equipment, if any.</i>		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A

<sup>1</sup> Any upstream and/or downstream actual emission increases that result from a project for which this PBR is claimed need to be authorized appropriately. Any associated upstream and/or downstream emissions authorized as part of the PBR claim will need to be included as part of the total new or increased emissions, unless: 1) these emissions stay below current authorized emission limits; 2) there is not a change to any underlying air authorizations for the applicable units associated with BACT, health and environmental impacts, or other representations (i.e. construction plans, operating procedures, throughputs, maximum emission rates, etc.); and 3) this claim is certified via PI-7 CERT or APD-CERT. Notwithstanding the exclusion of any upstream and/or downstream emissions under this PBR claim, the total of all emission increases, including upstream and/or downstream actual emission increases, are required to be part of the PBR registration to determine major new source review applicability under Title 30 TAC Chapter 116. The emission increases associated with the PBR claim and all upstream and/or downstream actual emission increases may not circumvent major new source review requirements under 30 TAC Chapter 116.



**Title 30 Texas Administrative Code § 106.262**  
**Permit by Rule (PBR) Checklist**  
**Facilities (Emission and Distance Limitations)**

Check the Most Appropriate Answer			
a4. Are one or more of the following chemicals is handled for this registration? (Check all that apply) <i>If "YES," answer the following four questions.</i>			<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
<input type="checkbox"/> acrolein	<input type="checkbox"/> diazomethane	<input type="checkbox"/> hydrogen sulfide	<input type="checkbox"/> ozone
<input type="checkbox"/> allyl chloride	<input type="checkbox"/> diborane	<input type="checkbox"/> ketene	<input type="checkbox"/> pentaborne
<input type="checkbox"/> ammonia (anhydrous)	<input type="checkbox"/> diglycidyl ether	<input type="checkbox"/> methylamine	<input type="checkbox"/> perchloromethyl mercaptan
<input type="checkbox"/> arsine	<input type="checkbox"/> dimethylhydrazine	<input type="checkbox"/> methyl bromide	<input type="checkbox"/> perchloryl fluoride
<input type="checkbox"/> boron trifluoride	<input type="checkbox"/> ethyleneimine	<input type="checkbox"/> methyl hydrazine	<input type="checkbox"/> phosgene
<input type="checkbox"/> bromine	<input type="checkbox"/> ethyl mercaptan	<input type="checkbox"/> methyl isocyanate	<input type="checkbox"/> phosphine
<input type="checkbox"/> carbon disulfide	<input type="checkbox"/> fluorine	<input type="checkbox"/> methyl mercaptan	<input type="checkbox"/> phosphorus trichloride
<input type="checkbox"/> chlorine	<input type="checkbox"/> formaldehyde (anhydrous)	<input type="checkbox"/> nickel carbonyl	<input type="checkbox"/> selenium
<input type="checkbox"/> chlorine dioxide	<input type="checkbox"/> hydrogen bromide	<input type="checkbox"/> nitric acid	<input type="checkbox"/> hexafluoride stibine
<input type="checkbox"/> chlorine trifluoride	<input type="checkbox"/> hydrogen chloride	<input type="checkbox"/> nitric oxide	<input type="checkbox"/> liquefied sulfur dioxide
<input type="checkbox"/> chloroacetaldehyde	<input type="checkbox"/> hydrogen cyanide	<input type="checkbox"/> nitrogen dioxide	<input type="checkbox"/> sulfur pentafluoride
<input type="checkbox"/> chloropicrin	<input type="checkbox"/> hydrogen fluoride	<input type="checkbox"/> oxygen difluoride	<input type="checkbox"/> tellurium hexafluoride
<input type="checkbox"/> chloroprene	<input type="checkbox"/> hydrogen selenide		
Are all facilities are located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor?			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Are the cumulative amount of any of the following chemicals resulting from one or more authorizations under this section (but not including permit authorizations) less than or equal to 500 pounds on the plant property?			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Are all listed chemicals handled only in unheated containers operated in compliance with the United States Department of Transportation regulation (49 Code of Federal Regulation, Parts 171-178)?			<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
a5. Are there any changes to or additions of any existing air pollution abatement equipment?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A
a6. Will there be any visible emissions, except uncombined water, emitted to the atmosphere from any point or fugitive source in amounts greater than 5.0% opacity in any six-minute period?			<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A

Save Form

Reset Form



**Title 30 Texas Administrative Code § 106.262**  
**Permit by Rule (PBR) Checklist**  
**Facilities (Emission and Distance Limitations)**

<b>D (feet)</b>	<b>K</b>	<b>Value Description</b>
100	326	E=maximum allowable hourly emission, and never to exceed 6 pounds per hour.
200	200	
300	139	
400	104	
600	65	
700	54	
800	46	K=value from the table on this page. (interpolate intermediate values)
900	39	
1,000	34	
2,000	14	D=distance to the nearest off-plant receptor
3,000 or more	8	

**Table 262**  
**Limit Values (L) for use with Exemptions from Permitting § 106.262**

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

<b>Compound</b>	<b>Limit (L) Milligrams Per Cubic Meter</b>
Acetone	590.
Acetaldehyde	9.
Acetone	4.
Acetonitrile	34.
Acetylene	2662.
N-Amyl Acetate	2.7
Sec-Amyl Acetate	1.1
Benzene	3.
Beryllium and Compounds	0.0005
Boron Trifluoride, as HF	0.5
Butyl Alcohol,	76.
Butyl Acrylate	19.
Butyl Chromate	0.01
Butyl Glycidyl Ether	30.
Butyl Mercaptain	0.3
Butyraldehyde	1.4
Butyric Acid	1.8
Butyronitrile	22.
Carbon Tetrachloride	12.
Chloroform	10.
Chlorophenol	0.2
Chloroprene	3.6
Chromic Acid	0.01
Chromium Metal, Chromium II and III Compounds	0.1
Chromium VI Compounds	0.01
Coal Tar Pitch Volatiles	0.1
Creosote	0.1
Cresol	0.5
Cumene	50.
Dicyclopentadiene	3.1
Diethylaminoethanol	5.5

**Table 262**  
**Limit Values (L) for use with Exemptions from Permitting § 106.262**

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter
Diisobutyl Ketone	63.9
Dimethyl Aniline	6.4
Dioxane	3.6
Dipropylamine	8.4
Ethyl Acrylate	0.5
Ethylene Dibromide	0.38
Ethylene Glycol	26.
Ethylene Glycol Dinitrate	0.1
Ethylidene 2-norbornene, 5	7.
Ethyl Mercaptan	0.08
Ethyl Sulfide	1.6
Glycolonitrile	5.
Halothane	16.
Heptane	350.
Hexanediamine, 1, 6	0.32
Hydrogen Chloride	1.
Hydrogen Fluoride	0.5
Hydrogen Sulfide	1.1
Isoamyl Acetate	133.
Isoamyl Alcohol	15.
Isobutyronitrile	22.
Kepone	0.001
Kerosene	100.
Malononitrile	8.
Mesityl Oxide	40.
Methyl Acrylate	5.8
Methyl Amyl Ketone	9.4
Methyl-T-Butyl Ether	45.
Methyl Butyl Ketone	4.
Methyl Disulfide	2.2

**Table 262**  
**Limit Values (L) for use with Exemptions from Permitting § 106.262**

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

<b>Compound</b>	<b>Limit (L) Milligrams Per Cubic Meter</b>
Methylenebis (2-chloroaniline) (MOCA)	0.003
Methylene Chloride	26.
Methyl Isoamyl Ketone	5.6
Methyl Mercaptan	0.2
Merthyl Methacrylate	34.
Methyl Propyl Ketone	530.
Methyl Sulfide	0.3
Mineral Spirits	350.
Naphtha	350.
Nickel, Inorganic Compounds	0.015
Nitroglycerine	0.1
Nitropropane	5.
Octane	350.
Parathion	0.05
Pentane	350.
Perchloroethylene	33.5
Petroleum Ether	350.
Phenyl Mercaptan	0.4
Propionitrile	14.
Propyl Acetate	62.6
Propylene Oxide	20.
Propyl Mercaptan	0.23
Silica-amorphous-precipitated, silica gel	4.
Silicon Carbide	4.

**Table 262**  
**Limit Values (L) for use with Exemptions from Permitting § 106.262**

The values are not to be interpreted as acceptable health affects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for new Construction or Modification).

Compound	Limit (L) Milligrams Per Cubic Meter
Stoddard Solvent	350.
Styrene	21.
Succiononitrile	20.
Tolidin	0.02
Trichloroethylene	135.
Trinethylamine	0.1
Valeric Acid	0.34
Vinyl Acetate	15.
Vinyl Chloride	2.
<b>Note:</b> The time weighted average (TWA) threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), in its TLVs and BEIs guide (1997 Edition) shall be used for compounds not included in the table. The Short Term Exposure Level (STEL) or Ceiling Limit (annotated with a "C") published by the ACGIH shall be used for compounds that do not have a published TWA TLV. This section cannot be used if the compound is not listed in the table or does not have a published TWA TLV, STEL, or Ceiling Limit in the ACGIH TLVs and BEIs guide.	



**Exemption § 106.472 Checklist  
(Previously Standard Exemption 51)  
Organic Liquid Loading and Unloading**

The following checklist is designed to help you confirm that you meet § 106.472, previously Standard Exemption 51 (STDX 51), requirements. **Any “no” answers indicate that the claim of registration may not meet all requirements for the use of Exemption § 106.472, previously Standard Exemption 51.** If you do not meet all the requirements, you may alter the project design/operation in such a way that all the requirements of the exemption are met, or obtain a construction permit.

For additional assistance with your application, including resources to help calculate your emissions, please visit the Small Business and Local Government Assistance (SBLGA) webpage at the following link: [www.TexasEnviroHelp.org](http://www.TexasEnviroHelp.org)

Please Complete The Following:	
Have you included a description of how this exemption claim meets the general rule for the use of exemptions (§ 106, Subchapter A checklist is available)?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Are all the facilities claimed for exemption specifically named in the general section of § 106.472, previously STDX 51?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>[Note: This exemption has been interpreted to allow mixing or blending but <u>not</u> chemical reaction in tankage.]</b>	
Is the equipment designed to prevent visible emissions?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
Are all the chemicals to be loaded, unloaded, or stored described in §106.472 (previously STDX 51a-i)?	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A
<b>Attach a list of the chemicals and identify the appropriate item of § 106.472, previously STDX 51 that applies.</b>	
<b>Include additional supporting data. For example, a § 106.472, previously STDX 51(i), claim should identify initial boiling points of all compounds to be covered.</b>	
Will aqueous ammonia solutions, hydrochloric acid, or acetic acid be vented through a water scrubber?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
Are facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2-methyl styrene, or any other compound with an initial boiling point of 300 degrees F or greater listed in 40 CFR 261, Appendix VIII, located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facility or the owner of the property upon which the facility is located?	<input type="checkbox"/> YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> N/A
<b>List these compounds and show their handling location on an attached scaled plot plan.</b>	

**Save Form**

**Reset Form**

**TEXAS COMMISSION ON ENVIRONMENTAL QUALITY**

**Table 1(a) Emission Point Summary**

<b>Date:</b>	December 2017	<b>Permit No:</b>	147140	<b>Regulated Entity No.:</b>	100788959
<b>Area Name:</b>	GAF Materials Corporation, Dallas Facility			<b>Customer Reference No.:</b>	605251487

Review of applications and issuance of permits will be expedited by supplying all necessary information requested on this table

<b>AIR CONTAMINANT DATA</b>					
<b>1. Emission Point</b>			<b>2. Component or Air Contaminant Name</b>	<b>3. Air Contaminant Emission Rate</b>	
<b>EPN (A)</b>	<b>FIN (B)</b>	<b>NAME (C)</b>		<b>Pounds per Hour (A)</b>	<b>TPY (B)</b>
CFL2	TK-AD, T-22 and SEALAP	Line 3 Sealant and Adhesive System - Mist Elimination System	CO	0.06	0.05
			PM	<0.01	<0.01
			PM <sub>10</sub>	<0.01	<0.01
			PM <sub>2.5</sub>	<0.01	<0.01
			VOC	0.98	0.58
			H <sub>2</sub> S	0.03	0.02
			Carbonyl Sulfide	<0.01	<0.01

EPN = Emission Point Number

FIN = Facility Identification Number

### 3. PERMIT BY RULE FEE

---

Per 30 TAC §106.50 – *Registration Fees for Permits By Rule*, a \$450 fee is required to be submitted for this revision application. This fee has been submitted to the TCEQ Revenue Section via the STEERS ePermits system at the time of submittal.



## 4. PROCESS DESCRIPTION

---

GAF is a nationwide manufacturer of building material products. The GAF Dallas Plant manufactures asphalt shingles for the roofing industry. There are two asphalt roofing lines at the GAF Dallas Plant: Line 1 and Line 3. Self-seal asphalt based dots are applied to the asphalt roofing sheets before they are cut into shingles and automatically packaged. Adhesive stripes are applied to the laminated shingles in Line 3 before the shingles are cut and packaged. The existing Line 3 sealant application system is installed to apply self-seal asphalt and laminate self-seal asphalt to the asphalt roofing sheets. The Line 3 sealant application system includes one new Line 3 sealant run tank (Facility Identification Number [FIN]: T-22), associated self-seal applicator (FIN: SEALAP), laminate self-seal applicator (FIN: SEALAP), and a Heatec heater (FIN: HTR9).

As part of the PBR Revision Application, GAF proposes to install the 3120 Adhesive Storage Tank (FIN: TK-AD) for the existing Line 3 sealant application system. The proposed 3120 Adhesive Storage Tank will also feed the existing self-seal applicator and laminate self-seal applicator to apply dots/stripes to the shingles. The Line 3 Heatec heater (FIN: HTR9) authorized under PBR 106.183 that is currently used to provide heat required by the Line 3 sealant application system will be decommissioned as part of this project. The Line 3 sealant application system will utilize the heat from the existing Line 1 Heatec heater (FIN: HRT1) authorized under PBR § 106.183. No changes are proposed to the existing Line 3 sealant run tank. As such, emission calculations for the existing Line 1 Heatec heater or the existing Line 3 sealant run tank are not included in this PBR Revision Application.

Currently, the Line 3 sealant run tank, self-seal applicator, and the laminate self-seal applicator are controlled by the Line 3 Mist Elimination System (Emission Point Number [EPN]: CFL2). The emissions from the proposed 3120 Adhesive Storage Tank will also be routed to the Line 3 Mist Elimination System (EPN: CFL2) for control. GAF does not expect any increase in actual emission increases from upstream or downstream processes as a result of the proposed project.

## 5. EMISSIONS DATA (CONFIDENTIAL)

---

This section contains confidential information that has been removed. Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, TX 78711-3087.

## 6. GENERAL REQUIREMENTS

This section lists the general requirements for authorization under a PBR with a description of how the Dallas Plant will comply with each requirement. Requirements of the specific PBRs claimed in this revision application are identified and discussed in Section 7 of this application.

### 6.1. REQUIREMENTS FOR PERMITTING BY RULE (30 TAC §106.4), EFFECTIVE APRIL 17, 2014

*Pursuant to the Texas Health and Safety Code, Texas Clean Air Act (TCAA), §382.057, the facilities or types of facilities listed in 30 TAC Chapter 106 are exempt from the permitting requirements of the TCAA, §382.0518, because such facilities will not make a significant contribution of air contaminants to the atmosphere. A facility shall meet the following conditions to be exempt from TCAA, §382.0518.*

*(a) To qualify for a permit by rule, the following general requirements must be met.*

*(1) Total actual emissions authorized under permit by rule from the facility shall not exceed the following limits, as applicable:*

- (A) 250 tons per year (tpy) of carbon monoxide (CO) or nitrogen oxides (NO<sub>x</sub>);*
- (B) 25 tpy of volatile organic compounds (VOC), sulfur dioxide (SO<sub>2</sub>), or inhalable particulate matter (PM);*
- (C) 15 tpy of particulate matter with diameters of 10 microns or less (PM<sub>10</sub>);*
- (D) 10 tpy of particulate matter with diameters of 2.5 microns or less (PM<sub>2.5</sub>); or*
- (E) 25 tpy of any other air contaminant except:*
  - (i) water, nitrogen, ethane, hydrogen, and oxygen; and*
  - (ii) notwithstanding any provision in any specific permit by rule to the contrary, greenhouse gases as defined in §101.1 of this title (relating to Definitions).*

As presented in Appendix A of this PBR revision application, the total emissions of all sources for authorization under this PBR will not exceed the above limits.

*(2) Any facility or group of facilities, which constitutes a new major stationary source, as defined in §116.12 of this title (relating to Nonattainment and Prevention of Significant Deterioration Review Definitions), or any modification which constitutes a major modification, as defined in §116.12 of this title, under the new source review requirements of the Federal Clean Air Act (FCAA), Part D (Nonattainment) as amended by the FCAA Amendments of 1990, and regulations promulgated thereunder, must meet the permitting requirements of Chapter 116, Subchapter B of this title (relating to New Source Review Permits) and cannot qualify for a permit by rule under this chapter. Persons claiming a permit by rule under this chapter should see the requirements of §116.150 of this title (relating to New Major Source or Major Modification in Ozone Nonattainment Areas) to ensure that any applicable netting requirements have been satisfied.*

As discussed in Section 1, the Dallas Plant is located in Dallas County, Texas, which is currently designated as a moderate nonattainment area for the 2008 eight-hour (8-hour) ozone standard, and is unclassified for all other criteria pollutants. The NNSR major source threshold is 100 tons per year (tpy) as a moderate ozone nonattainment area. The site is a

minor source of VOC and NO<sub>x</sub> in the ozone nonattainment area. The total of all emission increases as result of the proposed project will not result in an increase of VOC or NO<sub>x</sub> emissions to be greater than the NNSR major source threshold of 100 tpy. Therefore NNSR will not be triggered as result of the proposed project and the facility may be authorized under permit by rule provisions. Emission calculations are provided in Attachment A of this registration.

- (3) *Any facility or group of facilities, which constitutes a new major stationary source, as defined in 40 Code of Federal Regulations (CFR) §52.21, or any change which constitutes a major modification, as defined in 40 CFR §52.21, under the new source review requirements of the FCAA, Part C (Prevention of Significant Deterioration) as amended by the FCAA Amendments of 1990, and regulations promulgated thereunder because of emissions of air contaminants other than greenhouse gases, must meet the permitting requirements of Chapter 116, Subchapter B of this title and cannot qualify for a permit by rule under this chapter. Notwithstanding any provision in any specific permit by rule to the contrary, a new major stationary source or major modification which is subject to Chapter 116, Subchapter B, Division 6 of this title due solely to emissions of greenhouse gases may use a permit by rule under this chapter for air contaminants that are not greenhouse gases. However, facilities or projects which require a prevention of significant deterioration permit due to emissions of greenhouse gases may not commence construction or operation until the prevention of significant deterioration permit is issued.*

The Dallas Plant is a minor source with respect to the PSD permitting program. As noted in the response above, the total of all emission increases due to the proposed project will not result in an increase of VOC emissions to be greater than the PSD major source/modification threshold of 250 tpy. The affected facilities under this PBR registration do not constitute a new major stationary source or a major modification; therefore, PSD review is not triggered.

- (4) *Unless at least one facility at an account has been subject to public notification and comment as required in Chapter 116, Subchapter B or Subchapter D of this title (relating to New Source Review Permits or Permit Renewals), total actual emissions from all facilities permitted by rule at an account shall not exceed 250 tpy of CO or NO<sub>x</sub>; or 25 tpy of VOC or SO<sub>2</sub> or PM; or 15 tpy of PM<sub>10</sub>; or 10 tpy of PM<sub>2.5</sub>; or 25 tpy of any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen, and GHGs (as specified in §106.2 of this title (relating to Applicability)).*

The Dallas Plant has gone through a public notice for current NSR Permits. Therefore, these requirements do not apply.

- (5) *Construction or modification of a facility commenced on or after the effective date of a revision of this section or the effective date of a revision to a specific permit by rule in this chapter must meet the revised requirements to qualify for a permit by rule.*

The proposed project meets the requirements under the PBRs currently in effect. In the event that the facilities are modified, GAF will re-evaluate the applicability of the PBR(s) in effect at the time of modification.

- (6) *A facility shall comply with all applicable provisions of the FCAA, §111 (Federal New Source Performance Standards) and §112 (Hazardous Air Pollutants), and the new source review requirements of the FCAA, Part C and Part D and regulations promulgated thereunder.*

There are no applicable Standards of Performance for New Stationary Sources (NSPS) or National Emission Standards for Hazardous Air Pollutants (NESHAP) associated with sources authorized by this PBR registration.

- (7) *There are no permits under the same commission account number that contain a condition or conditions precluding the use of a permit by rule under this chapter.*

The Dallas Plant has no TCEQ permits that preclude the use of a PBR under this chapter.

- (8) *The proposed facility or group of facilities shall obtain allowances for NO<sub>x</sub> if they are subject to Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program).*

The requirements of 30 TAC Chapter 101, Subchapter H, Division 3 of this title applies to facilities located in the Houston/Galveston nonattainment area. The GAF Dallas Plant is not located in the Houston/Galveston nonattainment area.

- (b) *No person shall circumvent by artificial limitations the requirements of §116.110 of this title (relating to Applicability).*

The Dallas Plant will meet all the requirements of 30 TAC Chapter 106. Therefore, a state permit is not required, and the requirements of 30 TAC §116.110 will not be circumvented.

- (c) *The emissions from the facility shall comply with all rules and regulations of the commission and with the intent of the Texas Clean Air Act (TCAA), including protection of health and property of the public, and all emissions control equipment shall be maintained in good condition and operated properly during operation of the facility.*

GAF will be in compliance with the rules and regulations of the TCAA. The site has taken steps to ensure all operations will be authorized appropriately and will maintain on-site documentation to show compliance with all recordkeeping requirements. In addition, compliance with the requirements of 30 TAC Chapter 106 ensures protection of health and property of the public.

- (d) *Facilities permitted by rule under this chapter are not exempted from any permits or registrations required by local air pollution control agencies. Any such requirements must be in accordance with TCAA, §382.113 and any other applicable law.*

GAF is under the jurisdiction of City of Dallas Air Pollution Control Program. The Dallas Plant will comply the applicable requirements in this section.

## 6.2. REQUIREMENTS FOR RECORDKEEPING (30 TAC §106.8), EFFECTIVE NOVEMBER 1, 2001

- (a) *Owners or operators of facilities and sources that are de minimis as designated in §116.119 of this title (relating to De Minimis Facilities or Sources) are not subject to this section.*

The equipment and activities covered in this application are not de minimis facilities and are subject to the requirements of this section.

- (b) *Owners or operators of facilities operating under a permit by rule (PBR) in Subchapter C of this chapter (relating to Domestic and Comfort Heating and Cooling) or under those PBRs that only name the type of facility and impose no other conditions in the PBR itself do not need to comply with specific recordkeeping requirements of subsection (c) of this section. A list of these PBRs will be available through the commission's Austin central office, regional offices, and the commission's website. Upon request from the commission or any air pollution control program having jurisdiction, claimants must provide information that would demonstrate compliance with §106.4 of this title (relating to Requirements for Permitting by Rule), or the general requirements, if any, in effect at the time of the claim, and the PBR under which the facility is authorized.*

GAF is not requesting authorization of activities under PBRs that only name the type of facility and impose no other conditions; therefore, this section does not apply.

- (c) *Owners or operators of all other facilities authorized to be constructed and operate under a PBR must retain records as follows:*
- (1) *maintain a copy of each PBR and the applicable general conditions of §106.4 of this title or the general requirements, if any, in effect at the time of the claim under which the facility is operating. The PBR and general requirements claimed should be the version in effect at the time of construction or installation or changes to an existing facility, whichever is most recent. The PBR holder may elect to comply with a more recent version of the applicable PBR and general requirements;*

GAF will continue to maintain copies of the PBRs claimed in this revision registration, including a copy of the general conditions of 30 TAC §106.4, as required by this provision, in Sections 6 and 7. The PBRs claimed are the most recent versions as of the date of this revision registration.

- (2) *maintain records containing sufficient information to demonstrate compliance with the following:*
- (A) *all applicable general requirements of §106.4 of this title or the general requirements, if any, in effect at the time of the claim; and*
- (B) *all applicable PBR conditions;*

GAF will continue to maintain records containing sufficient information to demonstrate compliance with the general requirements of 30 TAC §106.4 and the conditions of the specific PBR claimed.

- (3) *keep all required records at the facility site. If however, the facility normally operates unattended, records must be maintained at an office within Texas having day-to-day operational control of the plant site;*

GAF will continue to maintain all records needed to demonstrate compliance with this section at the Dallas Plant.

- (4) *make the records available in a reviewable format at the request of personnel from the commission or any air pollution control program having jurisdiction;*

GAF will continue to maintain records in a reviewable format and will make them available to the TCEQ or any other air pollution control program having jurisdiction upon request.

- (5) *beginning April 1, 2002, keep records to support a compliance demonstration for any consecutive 12-month period. Unless specifically required by a PBR, records regarding the quantity of air contaminants emitted by a facility to demonstrate compliance with §106.4 of this title prior to April 1, 2002 are not required under this section; and*

GAF will continue to maintain records to support a compliance demonstration for any consecutive 12-month period.

- (6) *for facilities located at sites designated as major in accordance with §122.10(13) of this title (relating to General Definitions) or subject to or potentially subject to any applicable federal requirement, retain all records demonstrating compliance for at least five years. For facilities located at all other sites, all records demonstrating compliance must be retained for at least two years. These record retention requirements supersede any retention conditions of an individual PBR.*

GAF will continue to maintain records for a period of at least five years, as required.

## 7. SPECIFIC PERMIT BY RULE REQUIREMENTS

The Dallas Plant is proposing to authorize the potential emissions associated with the proposed changes under PBRs 106.261, 106.262 and 106.472. This section identifies the applicable requirements of these PBRs and documents how the Dallas Plant will continue to comply with each requirement. Since there are no changes proposed to the existing Line 3 sealant run tank, the specific §106.472 requirements are included for the proposed 3120 Adhesive Storage Tank only. General requirements for authorization under a PBR are discussed in Section 6 of this report.

### 7.1. REQUIREMENTS FOR FACILITIES (EMISSION LIMITATIONS) (30 TAC §106.261), EFFECTIVE NOVEMBER 1, 2003

*(a) Except as specified under subsection (b) of this section, facilities, or physical or operational changes to a facility, are permitted by rule provided that all of the following conditions of this section are satisfied.*

- (1) The facilities or changes shall be located at least 100 feet from any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.*

The emission sources affected by the proposed project are located at least 100 feet from any recreational area, residence, or other structure not occupied or used solely by the Dallas Plant.

- (2) Total new or increased emissions, including fugitives, shall not exceed 6.0 pounds per hour (lb/hr) and ten tons per year of the following materials: acetylene, argon, butane, crude oil, refinery petroleum fractions (except for pyrolysis naphthas and pyrolysis gasoline) containing less than ten volume percent benzene, carbon monoxide, cyclohexane, cyclohexene, cyclopentane, ethyl acetate, ethanol, ethyl ether, ethylene, fluorocarbons Numbers 11, 12, 13, 14, 21, 22, 23, 113, 114, 115, and 116, helium, isohexane, isopropyl alcohol, methyl acetylene, methyl chloroform, methyl cyclohexane, neon, nonane, oxides of nitrogen, propane, propyl alcohol, propylene, propyl ether, sulfur dioxide, alumina, calcium carbonate, calcium silicate, cellulose fiber, cement dust, emery dust, glycerin mist, gypsum, iron oxide dust, kaolin, limestone, magnesite, marble, pentaerythritol, plaster of paris, silicon, silicon carbide, starch, sucrose, zinc stearate, or zinc oxide.*

Emissions of carbon monoxide from Line 3 sealant application system as result of the proposed project will not exceed 6.0 lb/hr and 10 tpy.

- (3) Total new or increased emissions, including fugitives, shall not exceed 1.0 lb/hr of any chemical having a limit value (L) greater than 200 milligrams per cubic meter (mg/m<sup>3</sup>) as listed and referenced in Table 262 of §106.262 of this title (relating to Facilities (Emission and Distance Limitations)) or of any other chemical not listed or referenced in Table 262. Emissions of a chemical with a limit value of less than 200 mg/m<sup>3</sup> are not allowed under this section.*

Emissions of carbonyl sulfide from the Line 3 sealant application system as result of the proposed project will meet the emission limit in this paragraph.

- (4) For physical changes or modifications to existing facilities, there shall be no changes to or additions of any air pollution abatement equipment.*



The proposed project will not involve changes to or additions of any air pollution abatement equipment.

- (5) *Visible emissions, except uncombined water, to the atmosphere from any point or fugitive source shall not exceed 5.0% opacity in any six-minute period.*

Visible emissions from sources associated with the Line 3 sealant application system will not exceed 5.0% opacity in any six-minute averaging period.

- (6) *For emission increases of five tons per year or greater, notification must be provided using Form PI-7 within ten days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any.*

The total emissions from the Line 3 sealant application system as result of the proposed project are less than five tons per year. Therefore, this section does not apply.

- (7) *For emission increases of less than five tons per year, notification must be provided using either:*

- (A) *Form PI-7 within ten days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any; or*
- (B) *Form PI-7 by March 31 of the following year summarizing all uses of this permit by rule in the previous calendar year. This annual notification shall include a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any.*

The total emissions from the Line 3 sealant application system as result of the proposed project are less than five tons per year. GAF is submitting this revision application including the required information listed above by March 31 of the following year.

- (b) *The following are not authorized under this section:*

- (1) *construction of a facility authorized in another section of this chapter or for which a standard permit is in effect; and*
- (2) *any change to any facility authorized under another section of this chapter or authorized under a standard permit.*

This PBR revision registration is not being used to authorize construction of a facility authorized under another PBR or for which a standard permit is in effect, or any change to any facility authorized under another PBR or authorized under a standard permit.

## **7.2. REQUIREMENTS FOR FACILITIES (EMISSION AND DISTANCE LIMITATIONS) (30 TAC § 106.262) EFFECTIVE NOVEMBER 1, 2003**

- (a) *Facilities, or physical or operational changes to a facility, are permitted by rule provided that all of the following conditions of this section are satisfied.*

- (1) Emission points associated with the facilities or changes shall be located at least 100 feet from any off-plant receptor. Off-plant receptor means any recreational area or residence or other structure not occupied or used solely by the owner or operator of the facilities or the owner of the property upon which the facilities are located.

The location of the emission point associated with facilities proposed to be authorized under this PBR registration (i.e., Line 3 Mist Elimination System stack) is at least 100 feet from the nearest off-plant receptor, including any off-property recreational area, residence, or other structure not occupied or used solely by the Dallas Plant.

- (2) New or increased emissions, including fugitives, of chemicals shall not be emitted in a quantity greater than five tons per year nor in a quantity greater than  $E$  as determined using the equation  $E = L/K$  and the following table.

<u>D, Feet</u>	<u>K</u>	
100	326	$E$ = maximum allowable hourly emission, and never to exceed 6 pounds per hour.
200	200	
300	139	
400	104	
500	81	$L$ = value as listed or referenced in Table 262
600	65	
700	54	
800	46	
900	39	$K$ = value from the table on this page. (interpolate intermediate values)
1,000	34	
2,000	14	$D$ = distance to the nearest off-plant receptor.
3,000 or more	8	

TABLE 262

LIMIT VALUES ( $L$ ) FOR USE WITH EXEMPTIONS FROM PERMITTING §106.262

The values are not to be interpreted as acceptable health effects values relative to the issuance of any permits under Chapter 116 of this title (relating to Control of Air Pollution by Permits for New Construction or Modification).

<u>Compound</u>	<u>Limit (<math>L</math>) Milligrams Per Cubic Meter</u>
Acetone	590
Acetaldehyde	9
Acetone Cyanohydrin	4
Acetonitrile	34
Acetylene	2662
N-Amyl Acetate	2.7
Sec-Amyl Acetate	1.1
Benzene	3
Beryllium and Compounds	0.0005
Boron Trifluoride, as HF	0.5
Butyl Alcohol, -	76
Butyl Acrylate	19

<u>Compound</u>	<u>Limit (L)</u> <u>Milligrams Per Cubic</u> <u>Meter</u>
Butyl Chromate	0.01
Butyl Glycidyl Ether	30
Butyl Mercaptan	0.3
Butyraldehyde	1.4
Butyric Acid	1.8
Butyronitrile	22
Carbon Tetrachloride	12
Chloroform	10
Chlorophenol	0.2
Chloroprene	3.6
Chromic Acid	0.01
Chromium Metal, Chromium II and III Compounds	0.1
Chromium VI Compounds	0.01
Coal Tar Pitch Volatiles	0.1
Creosote	0.1
Cresol	0.5
Cumene	50
Dicyclopentadiene	3.1
Diethylaminoethanol	5.5
Diisobutyl Ketone	63.9
Dimethyl Aniline	6.4
Dioxane	3.6
Dipropylamine	8.4
Ethyl Acrylate	0.5
Ethylene Dibromide	0.38
Ethylene Glycol	26
Ethylene Glycol Dinitrate	0.1
Ethylidene-2-norbornene, 5-	7
Ethyl Mercaptan	0.08
Ethyl Sulfide	1.6
Glycolonitrile	5
Halothane	16
Heptane	350
Hexanediamine, 1,6-	0.32
Hydrogen Chloride	1
Hydrogen Fluoride	0.5
Hydrogen Sulfide	1.1
Isoamyl Acetate	133
Isoamyl Alcohol	15
Isobutyronitrile	22
Kepone	0.001
Kerosene	100
Malononitrile	8
Mesityl Oxide	40
Methyl Acrylate	5.8

<u>Compound</u>	<u>Limit (L)</u> <u>Milligrams Per Cubic</u> <u>Meter</u>
Methyl Amyl Ketone	9.4
Methyl-t-butyl ether	45
Methyl Butyl Ketone	4
Methyl Disulfide	2.2
Methylenebis (2-chloroaniline) (MOCA)	0.003
Methylene Chloride	26
Methyl Isoamyl Ketone	5.6
Methyl Mercaptan	0.2
Methyl Methacrylate	34
Methyl Propyl Ketone	530
Methyl Sulfide	0.3
Mineral Spirits	350
Naphtha	350
Nickel, Inorganic Compounds	0.015
Nitroglycerine	0.1
Nitropropane	5
Octane	350
Parathion	0.05
Pentane	350
Perchloroethylene	33.5
Petroleum Ether	350
Phenyl Mercaptan	0.4
Propionitrile	14
Propyl Acetate	62.6
Propylene Oxide	20
Propyl Mercaptan	0.23
Silica-amorphous- precipitated, silica gel	4
Silicon Carbide	4
Stoddard Solvent	350
Styrene	21
Succinonitrile	20
Tolidine	0.02
Trichloroethylene	135
Trimethylamine	0.1
Valeric Acid	0.34
Vinyl Acetate	15
Vinyl Chloride	2

*NOTE: The time weighted average (TWA) Threshold Limit Value (TLV) published by the American Conference of Governmental Industrial Hygienists (ACGIH), in its TLVs and BEIs guide (1997 Edition) shall be used for compounds not included in the table. The Short Term Exposure Level (STEL) or Ceiling Limit (annotated with a "C") published by the ACGIH shall be used for compounds that do not have a published TWA TLV. This section cannot be used if the compound is not listed in*

*the table or does not have a published TWA TLV, STEL, or Ceiling Limit in the ACGIH TLVs and BEIs guide.*

The Dallas Plant has compared the total asphalt fume emissions being authorized under §106.262 as a result of the proposed project to the list of compounds contained in Figure 2: 30 TAC §106.262(a)(2), as well as to the compounds included in the *TLVs and BEIs guide (1997 Edition)*.<sup>3</sup> Emissions of the asphalt fume are proposed to be authorized under §106.262 and will not exceed the respective “E” determined in the equation “E = L/K” or five tons per year, as documented in Appendix A.

- (3) *Notification must be provided using Form PI-7 within ten days following the installation or modification of the facilities. The notification shall include a description of the project, calculations, and data identifying specific chemical names, L values, D values, and a description of pollution control equipment, if any.*

This PBR revision application is being submitted to authorize the proposed project at the Dallas Plant under PBR §106.262, and includes:

- > TCEQ Form PI-7 CERT (via STEERS)
- > Process Description
- > Emission Calculations
- > Identification of the emitted compounds
- > Applicable limit values

- (4) *The facilities in which the following chemicals will be handled shall be located at least 300 feet from the nearest property line and 600 feet from any off-plant receptor and the cumulative amount of any of the following chemicals resulting from one or more authorizations under this section (but not including permit authorizations) shall not exceed 500 pounds on the plant property and all listed chemicals shall be handled only in unheated containers operated in compliance with the United States Department of Transportation regulations (49 Code of Federal Regulations, Parts 171-178): acrolein, allyl chloride, ammonia (anhydrous), arsine, boron trifluoride, bromine, carbon disulfide, chlorine, chlorine dioxide, chlorine trifluoride, chloroacetaldehyde, chloropicrin, chloroprene, diazomethane, diborane, diglycidyl ether, dimethylhydrazine, ethyleneimine, ethyl mercaptan, fluorine, formaldehyde (anhydrous), hydrogen bromide, hydrogen chloride, hydrogen cyanide, hydrogen fluoride, hydrogen selenide, hydrogen sulfide, ketene, methylamine, methyl bromide, methyl hydrazine, methyl isocyanate, methyl mercaptan, nickel carbonyl, nitric acid, nitric oxide, nitrogen dioxide, oxygen difluoride, ozone, pentaborane, perchloromethyl mercaptan, perchloryl fluoride, phosgene, phosphine, phosphorus trichloride, selenium hexafluoride, stibine, liquified sulfur dioxide, sulfur pentafluoride, and tellurium hexafluoride. Containers of these chemicals may not be vented or opened directly to the atmosphere at any time.*

The facilities involved in the PBR revision application to be authorized under §106.262 do not handle hydrogen sulfide or any of the chemicals listed above. Therefore, the requirements do not apply.

- (5) *For physical changes or modifications to existing facilities, there shall be no changes or additions of air pollution abatement equipment.*

---

<sup>3</sup> American Conference of Governmental Industrial Hygienists, *TLVs and BEIs Guide*, 1997 Edition

The proposed project does not involve physical changes to or additions of air pollution abatement equipment to existing facilities.

- (6) Visible emissions, except uncombined water, to the atmosphere from any point or fugitive source shall not exceed 5.0% opacity in any six-minute period.*

Visible emissions from the facilities involved in this PBR revision application will not exceed five percent opacity in any six-minute period.

- (b) The following are not authorized under this section except as noted in subsection (c) of this section:*

- (1) construction of a facility authorized in another section of this chapter or for which a standard permit is in effect; and*
- (2) any change to any facility authorized under another section of this chapter or authorized under a standard permit.*

None of the facilities associated with this PBR revision application are authorized under another section of Chapter 106 or standard permit.

- (c) If a facility has been authorized under another section of this chapter or under a standard permit, subsection (a)(2) and (3) of this section may be used to qualify the use of other chemicals at the facility.*

None of the facilities associated with this PBR revision application are authorized under another section of Chapter 106 or standard permit.

### **7.3. REQUIREMENTS FOR ORGANIC AND INORGANIC LIQUID LOADING AND UNLOADING (30 TAC § 106.472) EFFECTIVE SEPTEMBER 4, 2000**

*Liquid loading or unloading equipment for railcars, tank trucks, or drums; storage containers, reservoirs, tanks; and change of service of material loaded, unloaded, or stored is permitted by rule, provided that no visible emissions result and the chemicals loaded, unloaded, or stored are limited to:*

- (1) the following list: asphalt, resins, soaps, lube oils, fuel oils, waxes, polymers, detergents, lube oil additives, kerosene, wax emulsions, vegetable oils, greases, animal fats, and diesel fuels;*
- (2) water or wastewater;*
- (3) aqueous salt solutions;*
- (4) aqueous caustic solutions, except ammonia solutions;*
- (5) inorganic acids except oleum, hydrofluoric, and hydrochloric acids;*
- (6) aqueous ammonia solutions if vented through a water scrubber;*

*(7) hydrochloric acid if vented through a water scrubber;*

*(8) acetic acid if vented through a water scrubber;*

*(9) organic liquids having an initial boiling point of 300 degrees Fahrenheit or greater. Facilities loading, unloading, or storing butyric acid, isobutyric acid, methacrylic acid, mercaptans, croton oil, 2- methyl styrene, or any other compound with an initial boiling point of 300 degrees Fahrenheit or greater listed in 40 Code of Federal Regulations 261, Appendix VIII shall be located at least 500 feet from any recreational area or residence or other structure not occupied or used solely by the owner of the facility or the owner of the property upon which the facility is located.*

The proposed 3120 Adhesive Storage Tank will store adhesive asphalt, which is included in the list of compounds permitted by rule in §106.472(1). GAF will comply with the requirements of §106.472, including no visible emissions.

## APPENDIX A: EMISSION CALCULATIONS (CONFIDENTIAL)

---

This section contains confidential information that has been removed. Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, TX 78711-3087.



**GAF Dallas Plant**  
**Emissions Summary and PBR 106.261 and 106.262 Compliance Demonstration**

**Table 1. Annual Emission Summary and PBR Compliance Evaluation**

EPN	Description	PBR	Annual Emission Rate (tpy)					Change in PBR Revision Project?
			CO	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (asphalt fume)	VOC (asphalt fume)	H <sub>2</sub> S	Carbonyl Sulfide (HAP)	
CFL2	Line 3 Sealant Run Tank	PBR 106.472	0.01	2.48E-04	0.18	6.21E-03	--	No Changes
	3120 Adhesive Storage Tank	PBR 106.472	0.02	4.59E-04	0.33	0.01	--	New Tank
	Self-seal Applicator and Laminate Self-seal Applicator	PBRs 106.261, 106.262	0.02	1.08E-04	0.08	--	6.79E-04	Increase in Sealant Throughput and Authorize Adhesive Throughput
<b>Total Annual Emissions</b>			<b>0.05</b>	<b>8.14E-04</b>	<b>0.58</b>	<b>0.02</b>	<b>6.79E-04</b>	
<b>Comparison to PBR 106.4 Limits</b>								
			106.4 Limits <sup>1</sup>	250	25/15/10	25	25	
			In compliance with 106.4?	Y	Y	Y	Y	

<sup>1</sup> The Dallas Plant has been through public notice, the PBR limits are obtained from 30 TAC 106.4(a)(1).

**Table 2. Hourly Emission Summary**

EPN	Description	PBR	Hourly Emission Rate (lb/hr)					Change in PBR Revision Project?
			CO	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (asphalt fume)	VOC (asphalt fume)	H <sub>2</sub> S	Carbonyl Sulfide (HAP)	
CFL2	Line 3 Sealant Run Tank	PBR 106.472	2.81E-03	6.60E-05	0.05	1.66E-03	--	No Changes
	3120 Adhesive Storage Tank	PBR 106.472	0.12	2.82E-03	2.00	0.07	--	New Tank
	Self-seal Applicator and Laminate Self-seal Applicator	PBRs 106.261, 106.262	4.76E-03	2.46E-05	0.02	--	1.55E-04	Increase in Sealant Throughput and Authorize Adhesive Throughput
<b>Total Hourly Emissions</b>			<b>0.13</b>	<b>2.91E-03</b>	<b>2.06</b>	<b>0.07</b>	<b>1.55E-04</b>	

**Table 3. Distance and K Value<sup>1</sup>**

D (minimum) (feet)	K
450	92.5

<sup>1</sup> Minimum distance from the proposed EPN to the nearest off-plant receptor was used for emission limit determination.  
The K value is obtained from an interpolation of the values in 30 TAC §106.262 (a)(2).

**Table 4. PBR 106.261 and 106.262 Compliance Demonstration**

Speciated Chemical	L <sup>1</sup>	Allowed Emission Limit (L/K)		Proposed Total Emissions <sup>3</sup>		Authorization	Qualified for PBR?
	(mg/m <sup>3</sup> )	(lb/hr)	(tpy)	(lb/hr)	(tpy)		
CO	N/A	6	10	4.76E-03	0.02	106.261(a)(2)	Yes
Asphalt Fume <sup>2</sup> (PM/PM <sub>10</sub> /PM <sub>2.5</sub> + VOC)	5	0.054	0.24	0.017	0.08	106.262	Yes
Carbonyl Sulfide	N/A	1	4.38	1.55E-04	6.79E-04	106.261(a)(3)	Yes

<sup>1</sup> The TLV values are obtained from Table 262 or the 1997 American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values list.

<sup>2</sup> Asphalt has both PM and VOC emissions since asphalt is a VOC itself and hot asphalt forms tar globules that are considered as PM.

Therefore, the PM and VOC emissions are added together for purposes of 106.262 to reflect the fact that they are different manifestations of the same substance.

## APPENDIX B: SAFETY DATA SHEET (CONFIDENTIAL)

---

This section contains confidential information that has been removed. Any request for portions of this application that are marked as confidential must be submitted in writing, pursuant to the Public Information Act, to the TCEQ Public Information Coordinator, MC 197, P.O. Box 13087, Austin, TX 78711-3087.